AMENDMENTS TO THE SPECIFICATION

IN THE SPECIFICATION:

Please add the following paragraph after the paragraph ending on page 3, line 8:

--Further scope of the applicability of the present invention will become apparent from the detailed description given hereinafter. However, it should be understood that the detailed description and specific examples, while indicating preferred embodiments of the invention, are given by way of illustration only, since various changes and modifications within the spirit and scope of the invention will become apparent to those skilled in the art from this detailed description.--

Please add the following paragraph before the paragraph beginning on page 3, line 11:

--The present invention will become more fully understood from the detailed description given hereinbelow and the accompanying drawings which are given by way of illustration only, and thus are not limitative of the present invention, and wherein:--

Please amend the paragraph beginning on page 3, line 11, as follows:

--FIG. 1 is a map showing an observation area~~,~~ _;_

FIG. 2 shows L-band and X-band polarization synthetic photographs of sea ice obtained by two SAR observations~;

FIG. 3(A) shows a draft profile along a sea ice track~;

FIG. 3(B) shows a standard deviation profile of the ice draft~;

FIG. 3(C) shows a backscattering coefficient profile of L-band HH polarization~;

FIG. 3(D) shows a backscattering coefficient profile of L-band VV polarization~;

FIG. 3(E) shows a backscattering coefficient profile of L-band HV polarization~;

FIG. 3(F) shows a backscattering coefficient profile of X-band HH polarization~;

FIG. 3(G) shows a backscattering coefficient profile of X-band VV polarization~;

FIG. 3(H) shows a backscattering coefficient profile of X-band HV polarization~;

FIG. 4 is a graph showing a correlation between an ice draft and a backscattering coefficient of L-band HV polarization~;

FIG. 5 is a graph showing a correlation between an ice draft and a backscattering coefficient of X-band VV polarization~;

FIG. 6 is a photograph showing an image obtained when a backscattering coefficient of an L-band HH polarization SAR image is converted into an ice draft~;

FIG. 7 is a diagram showing a classification result of sea ice obtained in the three stages of open water, thin ice, and thick ice~;and

FIG. 8 is a flow chart showing a method of classifying open water, thin ice, and thick ice~; and--

Please add the following paragraph before the heading beginning on page 4, line 10:

--FIG. 9 illustrates an exemplary system for observing draft of a desired sea ice.--

Please amend the paragraph beginning on page 4, line 21, as follows:

--The present inventor performed an ice thickness/drifting velocity observation as shown in Fig. 9 by using an ice thickness measuring sonar (IPS: Ice Profiling Sonar) 100 moored into the sea and a current meter 110 (ADCP: Acoustic Doppler Current Profiler). In sync with this IPS/ADCP sea ice observation, a sea ice observation was performed by a high-resolution airborne SAR (Pi-SAR) 120. A correlation 130 between an ice draft profile of sea ice that is actual measurements of ice thicknesses of sea ice passing over an IPS and an SAR backscattering coefficient profile will be described below.